

**United States Environmental Protection Agency  
Region X  
POLLUTION REPORT**

**Date:** Wednesday, September 14, 2005  
**From:** Daniel Heister, On-Scene Coordinator

**To:** Chris Field, EPA Region 10

**Subject:**  
Final POLREP  
North Ridge Estates 2005 Fund Lead Removal Action  
3942 Old Fort Road, Klamath Falls, OR  
Latitude: 42.2625  
Longitude: -121.7446

<b>POLREP No.:</b>	5	<b>Site #:</b>	10BT
<b>Reporting Period:</b>	September 6 through 10, 2005	<b>D.O. #:</b>	0035
<b>Start Date:</b>	8/9/2005	<b>Response Authority:</b>	CERCLA
<b>Mob Date:</b>	8/8/2005	<b>Response Type:</b>	Time-Critical
<b>Completion Date:</b>		<b>NPL Status:</b>	Non NPL
<b>CERCLIS ID #:</b>	ORN001002476	<b>Incident Category:</b>	Removal Action
<b>RCRIS ID #:</b>		<b>Contract #</b>	68-S7-01-64

**Site Description**

North Ridge Estates is located approximately three miles north of Klamath Falls, Klamath County, Oregon, on Old Fort Road and North Ridge Drive. The North Ridge Estate site is formerly the Klamath Falls Marine Recuperational Barracks facility, built in 1944 by the United States Department of Defense. In 1946, the property was transferred to the State of Oregon for use by the Oregon Institute of Technology.

When the Oregon Institute of Technology relocated in 1966, the property was transferred into private ownership. From 1966 to the mid-1970s, the property owners sold some of the buildings (primarily the dormitories) to individual buyers, who stripped the vacant buildings of salvageable materials such as copper and wood.

The North Ridge Estate property was purchased in December 1977 by the MBK Partnership of Klamath Falls, the present property developer. When MBK purchased the property, many of the original buildings remained, including the largest site buildings (e.g., mess hall, vehicle maintenance, gymnasium, covered swimming pool, and steam plant). After purchasing the property, MBK began a facility-wide project to demolish the remaining buildings so that the property could be subdivided into residential lots.

MBK performed the demolition on a facility-wide scale by knocking over the buildings with the ACM in place. After salvageable building materials were recovered, the remaining demolition debris (including the ACM) was crunched up to reduce the size and then buried on site. Reportedly, asbestos insulation was stripped from piping and boilers, the metal was sold, and

the insulation was left on site. In the late 1970s, the Oregon Department of Environmental Quality (DEQ) responded to a complaint of openly accumulated asbestos debris at the property and observed a bulldozer driving over four to six acres of demolition debris. The report described a great amount of “white, fluffy” insulation material being blown around the site by strong winds.

In 1979, EPA discovered demolition debris believed to contain ACM on the property currently owned by MBK. Because this demolition debris was exposed and uncontained on the MBK-owned property, MBK was issued a compliance order by the EPA pursuant to Section 113 (a)(3) of the Clean Air Act regarding the requirement to develop a plan for disposal of ACM contained within demolition debris on September 17, 1979. The compliance order stated that MBK “failed to properly strip asbestos containing materials from the insulation pipes when the pipes became exposed as required.” It further stated that “the company caused or permitted asbestos containing waste material to remain exposed, uncontained and undisposed of at the demolition site.”

The compliance order required MBK to submit a plan addressing the ACM from “...the present demolition operation and all material remaining from previous demolition.” The plan was to provide the EPA with a detailed description of the ACM disposal site. After proper disposal of the ACM, the order further required MBK to register the inactive waste site with Klamath County. In 2003, EPA was unable to identify any deed restrictions for ACM disposal sites at North Ridge Estates.

On April 13, 1993, a preliminary inspection, completed under the Defense Environmental Restoration Program, found that there were no hazardous conditions at the former Marine Recuperation Barracks. The memorandum stated that only two buildings, the warehouse and former brig, remained at the site. There is no reference to asbestos or ACM in the memorandum.

Currently, twenty-three of the lots in the project area have been sold and developed as single-family homes, and these homes have been occupied for residential use. Other undeveloped lots remain in private ownership or are owned by MBK.

In June of 2001, DEQ received a complaint of two large piles of asbestos insulated pipe on the surface of a lot being developed in North Ridge Estates. The DEQ inspector observed “white to pale brown colored platy looking” fragments on the lot and on other lots throughout the subdivision. An asbestos survey was conducted in 2002. Out of the 81 acres surveyed, over 50 acres contained ACM. In June 2002, DEQ and MBK entered into a Mutual Agreement and Order (MAO; Order No. AQ/AB-ER-01-250A). The MAO essentially provided for a survey of affected properties to identify visible ACM and outlined provisions and protocol for the removal of this material. In the summer of 2002 MBK reportedly removed approximately 50 tons of ACM from the surface of residential lots in the subdivision.

In the spring of 2003, after winter snows had melted away, additional ACM debris was observed on the ground, and in April 2003, DEQ referred the site to EPA Region 10. An Administrative Order on Consent (AOC) was signed by EPA Region 10 and MBK in May of 2003. Under the AOC a removal action was conducted by MBK and its contractors with close EPA oversight. Actions included: removal of visible surface ACM, identifying the extent and degree of asbestos contamination through extensive soil and air sampling, and identifying and mitigating further exposure through excavation or capping of burial pits and delineation of remaining buried steam line. A parallel and contemporaneous Streamlined Risk Assessment was conducted in cooperation with an EPA Region 10 toxicologist and MBK’s asbestos consultant.

The responsible party-led removal action was carried out from June 2003 through August

2004. Approximately seven tons of visible ACM were removed by hand from the surface of occupied lots, approximately 77 tons of heavily contaminated soil were excavated, 13 potential burial locations were identified and stabilized, and several thousand linear feet of buried steam pipe were located. EPA did a limited survey of occupied lots in April 2004 and March 2005. When the surface pick up of the lots was completed in September of 2003 visible ACM was mostly nonexistent. As of the March 2005 survey, wind erosion, snow melt, foot traffic and frost heave are believed to have caused resurfacing of near-surface ACM..

On April 25, 2005, EPA signed an action memorandum implementing a voluntary relocation action for North Ridge Estates residents. Of the twenty-seven households that were deemed eligible, fifteen opted to be relocated from June 10, 2005, to September 10, 2005.

In June and July of 2005, the EPA Region 10 Removal Program and its contractors conducted a removal assessment on the site. During this assessment, workers encountered significant resurfacing of mag insulation and conducted separate abatement actions at three residences.

### **Current Activities**

\*\*\* September 6 through 7, 2005. OSC-1, PST-1, START-2, USACE-1. EPA and USACE continue to manage relocation issues related to returning residents. PST and START begin to prepare for demobilization from the site by packing up equipment and supplies. At the end of September 7, the PST demobilizes their mobile command post from the site.

\*\*\* September 8, 2005. OSC-1, PST-1, START-2, USACE-1. The asbestos waste from the site, which is collected in one 20 cubic yard roll-off container, is transported off-site for proper disposal at Klamath Falls Landfill. START loads equipment and supplies into a box truck and demobilizes from the site.

\*\*\* September 9 through 10, 2005. OSC-1. OSC Heister completes the management of issues relating to returning residents and demobilizes from the site.

### **Planned Removal Actions**

None.

### **Next Steps**

EPA and START will continue to track and review analytical data from air sampling. EPA and START will prepare a final report presenting the methods and results of the removal assessment and action.

### **Key Issues**

None.

### **Estimated Costs \***

	<b>Budgeted</b>	<b>Total To Date</b>	<b>Remaining</b>	<b>% Remaining</b>
<b>Extramural Costs</b>				
ERRS - Cleanup Contractor	\$230,000.00	\$41,000.00	\$189,000.00	82.17%
RST/START	\$185,000.00	\$88,000.00	\$97,000.00	52.43%

<b>Intramural Costs</b>				
USEPA - Direct (Region, HQ)	\$40,000.00	\$0.00	\$40,000.00	100.00%
USEPA - InDirect	\$30,000.00	\$0.00	\$30,000.00	100.00%
<b>Total Site Costs</b>	<b>\$485,000.00</b>	<b>\$129,000.00</b>	<b>\$356,000.00</b>	<b>73.40%</b>

\* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

### **Disposition of Wastes**

1. One 20-cy roll-off container with asbestos waste transported by Waste Management to the Klamath Falls Landfill.

[www.epaosc.org/North\\_Ridge\\_Estates\\_2005](http://www.epaosc.org/North_Ridge_Estates_2005)